

CLAIMS

1. An interspecific *Nicotiana* hybrid of *Nicotiana Excelsior* x *N. Benthamiana*, wherein a sample of said seed has been deposited under ATCC Accession No. PTA -323.
2. A plant, or its parts, produced by growing the seed of claim 1.
3. Pollen of the plant of claim 2.
4. An ovule of the plant of claim 2.
5. A *Nicotiana* plant having essentially all of the physiological and morphological characteristics of the *Nicotiana* plant of claim 2, or its parts.
6. Tissue culture of the seed of claim 1.
7. A *Nicotiana* plant regenerated from the tissue culture of claim 6.
8. Tissue culture of regenerable cells of the plant, or its parts, of claim 2.
9. The tissue culture of claim 8 wherein the regenerable cells are embryos, meristematic cells, pollen, leaves, anthers, roots, root tips, flowers, seeds, stems, pods, or protoplasts or calli derived therefrom.
10. A *Nicotiana* plant regenerated from the tissue culture of claim 9.
11. A method of producing backcross progeny from interspecific *Nicotiana* hybrids comprising:
 - a. selecting one parent of an interspecific hybrid as a recurrent parent based on biomass greater than the primary interspecific hybrid;

b. backcrossing said interspecific hybrid to the recurrent parent and collecting the resulting seed.

12. The seed produced from the method of claim 11.

13. A *Nicotiana* plant, or its parts, produced by growing the seed of claim 12.

14. Tissue culture of regenerable cells of the plant, or its parts, of claim 13, wherein the regenerable cells are selected from the group consisting of: embryos, meristematic cells, pollen, leaves, anthers, roots, root tips, flower, seeds, stems, protoplasts and calli derived therefrom.

15. A method of producing backcross progeny from interspecific *Nicotiana* hybrids comprising:

- selecting one parent of an interspecific hybrid as a recurrent parent based on capacity for high level expression of systemic protein from a viral vector;
- backcrossing said interspecific hybrid to the recurrent parent and collecting the resulting seed.

16. The seed produced from the method of claim 15.

17. A *Nicotiana* plant, or its parts, produced by growing the seed of claim 16.

18. Tissue culture of regenerable cells of the plant, or its parts, of claim 17, wherein the regenerable cells are selected from the group consisting of: embryos, meristematic cells, pollen, leaves, anthers, roots, root tips, flower, seeds, stems, protoplasts and calli derived therefrom.